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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/521,950	03/09/2000	Sunao Tabata	016907/1061	2947

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FOLEY AND LARDNER
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WASHINGTON, DC 20007

EXAMINER

BURLESON, MICHAEL L

ART UNIT	PAPER NUMBER
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2626

DATE MAILED: 01/15/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/521,950

Applicant(s)

TABATA ET AL.

Examiner

Michael Burleson

Art Unit

2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) ____ is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☒ Claim(s) 15-18 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: .

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d).

Information Disclosure Statement

2. The information disclosure statement (IDS) was submitted on March 09, 2000. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Drawings

3. The drawings are objected to because in figures 3 part b, 7 parts b, g, l and p and 20; "BLANKING" should be -- BLACKING--. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

4. The disclosure is objected to because of the following informalities: page 25 line 8: "cover conversion", should read, --color conversion--, and page 29 line 3, "CUR" should read --UCR--.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 2 and 4-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. Regarding claim 2, line 15 "decoding means for decoding the second color image signal compressed by the compression means", however, the original specification and in particular figure 1, applicant discloses decoding the third color image signal and not the second color image and it is further unclear how and when the second color image is decoded.

8. Regarding claim 4, the claim recites the limitation "a color image signal" and "the color image signal" in lines 1,6 and 8. There is insufficient antecedent basis for this limitation in the claim.

9. Regarding claims 4-13, it is unclear which embodiment is being used. The independent claim 1 is geared toward the first embodiment in the specification and claims 4-13, which are dependent on claim 1, are geared toward the second embodiment in the specification. Furthermore, there is nothing in the specification combining any of the embodiments.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 1,2,3 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Satoshi Tanio (US 5,726,778) in view of Toda et al (US 6,476,924).

12. Regarding claim 1, Tanio teaches of an image processing apparatus (page 1 line 1) that has a color conversion circuit (page 5 lines 35-36) for converting a first color image signal that does not contain black (page 6 lines 18-24 and figure 2A), a UCR operating process for adding a black component (page 25-30). Tanio fails to teach of a compression means used on the basis of a frequency conversion system. Toda et al. teaches of a compression scheme including frequency conversion (page 4 lines 55-56). Tanio could be modified to have a compression scheme including frequency conversion of Toda et al. to limit memory space. This modification would have been obvious to one of ordinary skill in the art at the time of the invention to reduce memory load of the color image signal data.

13. Regarding claim 2, as best understood by the claim language, Toda et al. teaches of a decoder that decodes the compressed image data (page 8 lines 1-3) and

an image forming means on a predetermined medium based on the decoding means (page 16 lines 37-40; 42-45 and figure 20).

14. Regarding claim 3, Tanio teaches that the first color image signal entering the color conversion circuit is RGB signal (figure 2A), the second color image signal, leaving the color conversion circuit and entering the masking color processing circuit is CMY (figure 2A) and the third color image signal, which leaves the masking color processing circuit is CMYK (page 6 lines 24-30).

15. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Owada et al. (US 6,108,098) in view of Hayashi et al. (US 2001/0048530). Owada et al. teaches of an image processing apparatus that comprises of an image recognition circuit, which recognizes different types of images based on predetermined image data (figure 2 and column 5 lines 48-55; column 7 lines 30-35). Owada et al. fails to teach of a change in the processing of an image based on the recognized type of image. Hayashi et al. teaches that image processing is changed according to the type of images scanned and a determination is made on how to process the image (page 9 column 2 paragraph [0157]). Owada et al. could be modified to process an image based on the recognized type of image. This modification would have been obvious to one of ordinary skill in the art at the time of the invention to produce a better quality image.

Allowable Subject Matter

16. Claims 4-13 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

17. Claims 15-18 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication should be directed to Michael Burleson whose telephone number is (703) 305-8683 and fax number is (703) 746-3006. The examiner can normally be reached Monday thru Friday from 8:00 a.m. – 4:30p.m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly Williams can be reached at (703) 305-4863

Michael Burleson
Patent Examiner

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MIb

January 10, 2004

KAWilliams
KIMBERLY WILLIAMS
SUPERVISORY PATENT EXAMINER